



Received: 18 January 2020
Accepted: 29 September 2020

*Corresponding author: Kwaku Amofah, Department of Business Administration, Universitat de Lleida, Spain
E-mail: kwakuamofah@gmail.com

Reviewing editor:
Len Tiu Wright, De Montfort University Faculty of Business and Law, United Kingdom

Additional information is available at the end of the article

MANAGEMENT | RESEARCH ARTICLE

Entrepreneurial intentions among MBA students

Kwaku Amofah^{1,2*}, Ramon Saladríguez³ and Ellis Kofi Akwaa-Sekyi^{4,5}

Abstract: Increasing entrepreneurial activities in a country start with an intention that leads to increased innovative activities, wealth creation, industrialization, employment generation, economic growth, and development. This paper examines the effect of attitude towards entrepreneurship, subjective norm, locus of control, entrepreneurial self-efficacy, and environmental support on entrepreneurial intention of 159 MBA students from two private universities in Ghana. The study uses structural equation modelling (SEM) to analyze the data obtained from the participants. The results show that all the factors but entrepreneurial self-efficacy significantly affects students' entrepreneurial intentions. The study proffers policy-makers with the opportunity to nurture entrepreneurship in students as a foundation for transforming the intent into practice to address the huge employment gaps in emerging economies.

Subjects: Business, Management and Accounting; Economics; Economics and Development; Economics, Finance, Business' Industry

Keywords: entrepreneurial intentions; students; theory of planned behaviour

ABOUT THE AUTHOR

Kwaku AMOFAH is a Ph.D. Candidate of Law and Business Administration at the University of Lleida, Spain, Snr. Lecturer at Sunyani Technical University, Ghana and a Visiting Researcher at the University of Milano Bicocca, Italy.

Saladríguez Solé, Ramon (Ph.D.) is an Associate Professor of Financial Economy and Accounting at the University of Lleida, Spain. His research interests are Economic and Financial Indicators, European convergence International Accounting and Accounting Reform, Entrepreneurship and Business Creation and University Analytical Accounting. He has a couple of publications to his credit and attended conferences.

Ellis Kofi AKWAA-SEKYI holds a Ph.D. in Law and Business Administration (Banking and Finance option) from the University of Lleida, Spain. He is a Lecturer at the Catholic University College of Ghana, Sunyani. He is an associate researcher at the University of Lleida, Spain, University of Bari, Italy and University of Vaasa. Ellis is interdisciplinary and has interest in Sports Management and Finance, Corporate Governance, Internal Controls, Risk Management and Micro Finance.

PUBLIC INTEREST STATEMENT

Undoubtedly, entrepreneurship is the leading driver of development in local, regional and national economies. This study empirically tests Azjen's TPB-based variables in the context of private universities in Ghana and in the process shedding some light in an area which has barely produced literature. Almost all of our respondents fall within the category of the working class, hence there are practical implications for private, public and voluntary businesses and industries in their quest to instil the entrepreneurial spirit and proclivity in the workers to cause transformation and a turnaround in their respective institutions.

1. Introduction

Intensifying entrepreneurial activities in a country has the possibility of contributing to innovative activities, creating wealth, increasing competition, industrialization, employment generation, and economic growth (Paul & Shrivastava, 2015). For developing and emerging economies, entrepreneurial activities could alleviate unemployment especially the case of graduates. Youth unemployment is high in Ghana and quite pronounced among graduates. For example, the rate of graduate unemployment in Ghana rose from 14.7% in 1987 to 40% in 2011 (Baah-Boateng, 2015; Zakaria et al., 2014). The unemployment scenario is primarily due to lack of skills and entrepreneurial consciousness among the youth. Another reason for the high graduate unemployment situations is the heavy reliance on the government for employment into the public sector. In the words of Johnmark et al. (2016, p. 2), “today’s realities indicate that there is no government of any country that can absolutely provide jobs to absorb all graduates from her tertiary institutions. This means that there is the need for a change in the mindset of graduates from the *look for a job syndrome* to *create a job mentality* in order to actualize their educational aspirations”.

In spite of extant research in the area of entrepreneurial intention, data from emerging economies is still insufficient. The majority of research on entrepreneurship has focused on developed countries (Nabi & Linan, 2011). For example, studies on entrepreneurial intention focus on developed countries such as Spain (Camelo-Ordaz, Diáñez-González, & Ruiz-Navarro, 2016; Espiritu-Olmos & Sastre-Castillo, 2015), Poland (Nowinski & Haddoub, 2019), USA (Hsu et al., 2017). Thus, research using data from emerging economies is lacking. What widens this research gap is the over-concentration on public universities to the neglect of private universities whose existence has bridged the access gap to university education tremendously. We address this context gap by focusing this study on two private universities in Ghana. The objective is to determine which factors influence the entrepreneurial intentions of MBA graduates. According to Abiodun and Oyejoke (2017) intention is seen as the best predictor of entrepreneurial behaviour and intentionality is grounded on cognitive psychology that attempts to explain or predict human behaviour. The main assumption guiding this paper is that we believe the university environment is a fertile ground for breeding future and sustainable entrepreneurial activities needed for economic growth and national development. Hence, there is the need to identify, stimulate, and sustain student entrepreneurial intentions because entrepreneurs are not only born, but are also made.

Motivations for this study stem from prior research that qualifications acquired in postgraduate education influence entrepreneurial prospects through the acquisition of employment-related skills (Greene & Saridakis, 2008). According to Prodan and Drnovsek (2010) entrepreneurial intention is essential for entrepreneurial behaviour in academia. Some private universities including those from emerging economies (such as Ghana) have taken up the challenge by offering business programmes. In Ghana, as at the year 2018, there were 81 private universities (Ofori-Atta, 2019). Private universities in Ghana were established among other things, to augment the enrollment deficit in the public universities.

This study purposively selects two private universities to investigate the entrepreneurial intention among the MBA students. In a modified model, we complement the theory of planned behaviour with locus of control and environmental support as framework for the study after consulting extant literature (Oguntimehin and Olaniran, 2017; Esfandiar et al., 2019; Maes et al., 2014; Newman et al., 2019; Nowinski & Haddoub, 2019; Puni et al., 2018; Salami, 2019). We follow the recommendations of researchers in the field of psychology (Read et al. 2013; Yazdanpanah & Farouzani, 2015) who propose the inclusion of supplementary constructs to advance the predictive power of the TPB models. The reasoning for the adoption of the Theory of Planned Behaviour is based on its ability to explain human attitude towards a behaviour. Besides, entrepreneurship is a planned behaviour and cannot be created without sufficient planning (Jena, 2020). According to Ajzen (1991) the intentions to perform behaviours of different kinds can be predicted with high accuracy from attitudes toward the behaviour, subjective norms and perceived behavioural control (entrepreneurial self-efficacy). Some researchers, in predicting entrepreneurial intentions have

replaced perceived behavioural control with entrepreneurial self-efficacy (Krueger et al., 2000; Miao et al., 2016; Moriano et al., 2012). Our study, therefore, focuses on entrepreneurial self-efficacy instead of perceived behavioural control. Two other variables (Environmental Support and LOC) that influence entrepreneurial intentions were incorporated in the model. Locus of Control illustrates a closer effect on people's intention to act (Esfandiar et al., 2019; Espiritu-Olmos & Sastre-Castillo, 2015). According to Obschonka et al. (2018) environmental support profoundly influences entrepreneurial intention.

From a structural equation modelling (SEM) approach, the paper reports that, locus of control, attitude towards entrepreneurship, environmental support and subjective norm significantly affect student entrepreneurial mentality. By way of contribution, the study provides a framework for addressing graduate unemployment through detection of students with an entrepreneurial mentality. According to Obschonka et al. (2012) entrepreneurship seems to be the way of coping with massive unemployment and its attendant social vices among the youth. The study reinforces the Ghana government's efforts to address youth unemployment through various entrepreneurial-based flagship policies. Some of these interventions and institutions include Ghana Youth Employment Development (GYEEDA), National Youth Employment Programme (NYEP), Youth Employment Agency (YEA), Youth Entrepreneurship Support (YES), National Entrepreneurship and Innovation Programme (NEIP). At the core of these programs is to nurture the entrepreneurial skills of the young Ghanaian by providing seed money and technical support to start new ventures.

The forgoing deliberations buttress the need to study the entrepreneurial intentions among MBA students among private university students. But unfortunately, no such rigorous study has been carried out among private university students to measure their entrepreneurial intentions. We believe this study may bridge the gaps in the literature and practice.

The organization of this article is as follows. The next section covers literature review and hypothesis development, a theoretical model to depict the various variables influencing entrepreneurial intention. The next section entails literature review and hypothesis development, research methodology, followed by results and discussion and lastly we draw the main conclusions and outline the implications and limitations of our research.

2. Literature review and hypothesis development

Many authors (e.g., Autio et al., 2001; Buli & Yesuf, 2015; Carayannis et al., 2003; Esfandiar et al., 2019; Hisrich & Peters, 2002; Kickul & Gundry, 2002; Krueger et al., 2000; Maes et al., 2014; Nowinski & Haddoub, 2019; Salami, 2019) have examined factors influencing entrepreneurial intentions. Against this backdrop, we have reviewed literature on some of the popular entrepreneurial intentions, using the Theory of Planned Behaviour as the base, to study as part of this paper.

2.1. Entrepreneurial intention

Ajzen (2019) defines intention as "a person's readiness to perform a given behavior". Ajzen (1991) posits that intention is the immediate determinant of behavior, professing that, "... the stronger the intention to engage in (planned) behavior, the more likely should be its performance" (p. 181). Bird (1988) indicates that entrepreneurial intention is a state of an individual mind, which directs and guides them towards the development and the implementation of new business concept. Van Gelderen et al. (2008) highlight entrepreneurial intention as the intentions of setting up one's business in the future. Prior research has established that entrepreneurial intent is the primary predictor of future entrepreneurs (Krueger et al., 2000). Krueger et al. (2000) suggest that entrepreneurial activity can be predicted more accurately by studying intention rather than personality traits or situational factors. Among the intention-based theories like the Theory of Entrepreneurial Event, Institutional Economic Theory and Theory of Planned Behaviour, the latter has more analytical capability (Díaz-Casero et al., 2012). The TPB is the most popular theory to explain the antecedent and consequences of entrepreneurial intention (Iakovlera, Kolvereid & Stephen, 2011).

Besides, intention-based models contend that entrepreneurial venture creation must be preceded by the development of intentions to establish a start-up and by appreciating intentions we may be in better position to predict venture creation.

Ajzen (1991) proposes that the intentions to perform behaviours of different kinds can be predicted with high accuracy from Attitudes Toward the behaviour, subjective norms and perceived behavioural control (entrepreneurial self-efficacy). Some researchers, in predicting entrepreneurial intentions have replaced perceived behavioural control with entrepreneurial self-efficacy (Krueger et al., 2000; Miao et al., 2016; Moriano et al., 2012). Our study, therefore, focuses on entrepreneurial self-efficacy instead of perceived behavioural control. Two other variables (Environmental Support and LOC) that influence entrepreneurial intentions were incorporated in the model (Esfandiar et al., 2019; Obschonka et al., 2018).

2.2. Attitude towards entrepreneurship and entrepreneurial intention

Attitude Towards Entrepreneurship (ATE) refers to the degree to which one holds a positive or negative personal valuation about being an entrepreneur (Ajzen, 2001; Autio et al., 2013; Darren Lee-Ross, 2017; Krueger et al., 2000; Ozaralli & Rivenburgh, 2016). Previous studies by Autio et al. (2001) and Schwarz et al. (2009) have revealed that ATE was a major determinant in entrepreneurial intentions among respondents. Moriano et al. (2012) asserted that a positive attitude towards entrepreneurship was the strongest antecedent of entrepreneurial intentions. Thus, ATE is dominant in determining one's success or failure to overcome challenges when faced with equivocal situations in life (Darren Lee-Ross, 2017). Aragon-Sanchez et al. (2017) argued that an individual with a more positive attitude towards a given situation (e.g., entrepreneurial intention) is more likely to succeed as a person. Luthje and Frank (2003) observed that attitude toward entrepreneurship was the most important determinant of the intention to become self-employed and this attitude is influenced by the personality of the respondents. A number of authors (Aragon-Sanchez et al., 2017; Fini et al., 2012; Moriano et al., 2012) have established that the relationship between attitude towards entrepreneurship and entrepreneurial intentions is significant and the linkage has been proved in different circumstances. For instance, the small business founder's attitude towards entrepreneurial behaviour has been established to be the major factor of corporate entrepreneurial behaviour (Fini et al., 2012). Armitage and Conner (2001) maintained that there is a positive relationship between attitude towards entrepreneurship and entrepreneurial intention. Ayalew and Zeleke (2018), in studying the entrepreneurial intentions among engineering students in Ethiopia also found that ATE has a positive influence on students' self-employment. However, Gultom et al. (2020) established that attitude insignificantly influences intention among citizens of Indonesia, which was consistent with a paper by Zahid and Haji Din (2019).

From the forgoing, we hypothesize that:

H₁: Attitude Towards Entrepreneurship (ATE) has significant positive influence on entrepreneurial intentions.

2.3. Subjective norm (SN) and entrepreneurial intention

Subjective Norm (SN) is the perceived social pressure to perform or not to perform an entrepreneurial behaviour (Ajzen, 2001). Aragon-Sanchez et al. (2017) define SN as how an individual would behave in a particular setting. Entrepreneurship is associated with numerous changes and risks which may not be easily welcomed in an individual's lifestyle. This type of pressure could emanate from family members or the generality of society which forces an individual to do or not execute specific tasks. Hussain (2018) professed that a person would not desire to deviate from the norm and value held by close family members and even friends with whom one interacts on a regularly basis. The subjective norm has been perceived as traditionally weak, with respect to its role in the pattern of relationships in the TPB model, though this alleged

weakness is not so clear. Nevertheless, some studies have simply omitted SN (Peterman & Kennedy, 2003; Veciana et al., 2005), while others found it to be non-significant (Autio et al., 2001; Krueger et al., 2000). Wijerathna (2015) showed that subjective norms and attitudes are the greatest factors that influence entrepreneurial intentions among agricultural students in Sri Lanka. However, Kankam and Abukari (2020) in their research in the eastern region of Ghana noted that attitude and subjective norms seem better predictors of intention than PBC. Linan and Chen (2009) report that, in the specific area of entrepreneurship research, only 7 out of the 16 studies previously reported included SNs in the analysis but two of them did not perform any regression analysis. Of the remaining five studies, three found SN to significantly explain EI (Kolvereid, 1996b; Kolvereid & Isaksen, 2006; Tkachev & Kolvereid, 1999), whereas the other two found SN to be nonsignificant (Autio et al., 2001; Krueger et al., 2000). Therefore, although there is support for the idea that a direct SN–EI relationship might be established, some controversy remains. Kuada (2015) professed that certain cultural traits have the tendency of influencing entrepreneurial intentions. Ghana is a highly collectivist country (Hofstede, 2012) and Gelaidan and Abdullateef (2017) suggest that relation support (e.g. emotional support or access to start-up capital from family and friends) is a fundamental ingredient in nurturing entrepreneurial intentions in people. However, in highly collectivist cultures, people's inclination to become entrepreneurs is less (Autio et al., 2013; Takyi-Asiedu, 1993). Despite this assertion, collectivist values are necessary in nurturing entrepreneurship through the utilization of the requisite business resources (Lechler, 2001; Tiessen, 1997), the promotion of consumers' acceptance of entrepreneurs' innovations (Rauch et al. (2013). For instance, support from family and friends would boost people's confidence in the engagement of entrepreneurial activities, but its absence would serve as a disincentive. Gelaidan and Abdullateef (2017) in examining the entrepreneurial intentions in Malaysia argue that role models, family members and friends can provide economic and emotional support to the prospective entrepreneur. Gultom et al. (2020) in a study in Indonesia found that subjective norms have significant and positive influence on intention.

Therefore, we hypothesize that:

H₂. Subjective norm significantly and positively influences entrepreneurial intention.

2.4. Locus of control and entrepreneurial intentions

According to Rotter (1990) Locus of control (LOC) is the ability of individuals to control the events in life. Locus of control depicts the perception of one's ability to influence the outcome of a behaviour (Hsiao et al., 2016). Locus of Control has proven its importance in affecting the level of aspiration for entrepreneurship (Luthje & Frank, 2003; Rauch & Frese, 2007b). The Locus of Control theory has two categories of control perceptions (Ng et al., 2006; Zigarmi et al., 2018); internal or external and each has a differential influence on entrepreneurial intention. Bönte and Jarosch (2011) explored that an individual with a higher internal locus control is inclined towards self-employment because they are optimistic that their destiny is in their own hands. However, with an external locus of control, their life is determined by external circumstances like chance, luck or fate. Khan, Ahmed, Nawaz and Ramzan in a study in 2011 indicated that students with internal locus of control will display a positive inclination towards entrepreneurial intention. Earlier accounts on internal locus of control and entrepreneurial intention produced inconsistent and conflicting results (Ferreira et al., 2012; Gurol & Atsan, 2006; Rauch & Frese, 2007). Prior studies have revealed that students with higher internal locus of control are high in entrepreneurial behaviour and entrepreneurial intention (Gurol & Atsan, 2006; Koh, 1996; Mazzarol et al., 1999; Mueller & Thomas, 2001; Vodă & Nelu, 2019). However, Ferreira et al. (2012) and Dinis et al. (2013) did not register any significant correlation with entrepreneurial intentions. Chaudhary (2017) in a study of India University students observed that successful entrepreneurs have an internal locus of control compared to ordinary people. From the forgoing, and in the wake of these contradictions, we expect that people

with an internal locus of control to have a positive inclination towards entrepreneurial career (Ajzen, 1991; Esfandiar et al., 2019).

H₃: Internal Locus of control is positively associated with entrepreneurial intentions

2.5. Entrepreneurial self-efficacy (ESE) and entrepreneurial intention

Self-efficacy is “an individual’s belief in one’s capacity to organize and execute courses of action required to produce given attainments” (Bandura, 1997, p. 3). Chen et al. (1998) define entrepreneurial self-efficacy as the strength of an individual’s belief that he or she is capable of successfully performing the various roles and tasks of entrepreneurship. Entrepreneurial self-efficacy “measures a person’s belief in their ability to successfully launch an entrepreneurial venture” (McGee et al., 2009, p. 965) and calls for success in activities like innovation, marketing, management and finance which are relevant to the creation of an entrepreneurial venture (Chen et al., 1998; Hsu et al., 2017). Entrepreneurial self-efficacy is an important antecedent of entrepreneurial intention (Krueger et al., 2000; Newman, Obschonka, Schwarz, Cohen & Nielsen, 2019; Salami, 2019). Newman et al. (2019) argued that there is a significant positive relationship between ESE and entrepreneurial intentions of students and working people alike.

Subsequent to the emergence of Ajzen’s Theory of Planned Behaviour, a crucial line of research emerged to assess the link between ESE and entrepreneurial intention (Engle et al., 2010; Hsu et al., 2019; Kickul et al., 2009). This is probably due to the fact that empirical studies shown a significant positive relationship between ESE and Entrepreneurial Intentions (Barbosa et al., 2007; Chen et al., 1998). Prodan and Drnovsek (2010) emphasized that self-efficacy is the most significant variable in the explanation of academics’ entrepreneurial intentions as compared with other predictors. In conceptual terms, there is no difference between perceived behavioural control and self-efficacy (Ajzen, 2019). Authors like Ajzen (1991), Schwarz et al. (2009), and Trivedi (2016) perceive that PBC and Entrepreneurial Self-efficacy constructs as interchangeable. But, Terry (1993) has proposed that ESE and PBC are not entirely synonymous. For instance, Bandura (1992) has argued that PBC and ESE are quite dissimilar concepts. That is Self-efficacy is more concerned with cognitive perceptions of control based on internal control factors whereas PBC is more generally an external factor. Bandura (1997) sees Self-efficacy as close to the “perceived behavioral control” in Ajzen’s model. Perceived Behavioural Control bears a resemblance to the Theory of Perceived Self-Efficacy (Moriano et al., 2012) and for this study, PBC is substituted with ESE. This is not uncommon since some researchers (Hockerts, 2017; Tran & Von Korflesch, 2016) have applied one or more of the exogenous constructs in the TPB-based model. Armitage and Conner (2001) see Self-efficacy as a stronger predictor of entrepreneurial intentions. There is overwhelming empirical evidence to support a positive relationship between ESE and Entrepreneurial Intentions (Aragon-Sanchez et al., 2017; Chen et al., 1998; Krueger et al., 2000; Luthje & Frank, 2003). Some researchers (Krueger & Brazeal, 1994; Luthje & Frank, 2003; Pittaway et al., 2010) have opined that, the greatest the belief that the individual has in their abilities, the greater the entrepreneurial intention. Gielnik, Bledow and Stark (2019)’s paper on Tanzanian and Rwandan students showed that variability and the average in entrepreneurial self-efficacy participants displayed during an entrepreneurial training were positively related to business ownership in the succeeding year. In line with the preposition that self-efficacy helps people to generate the motivation to enhance their intentions, entrepreneurial research has found that nascent entrepreneurs are more likely to start and successfully manage a business when their entrepreneurial self-efficacy is high.

Thus, we posit that:

H₄: Entrepreneurial Self-efficacy is positively related to entrepreneurial intention

2.6. Entrepreneurial intention and Environment Support

The Eurobarometer Survey on Entrepreneurship reports that a lack of business experience, the challenge of raising start-up capital, red tape, the poor economic environment and an innate fear of failure were to be blamed for inhibiting more of Europe's potential entrepreneurs from venturing into entrepreneurship. Stephen et al. (2005) point out government support measures and processes as fundamental in the decision to start a firm. According to Van de Ven (1993), entrepreneurial research without reference to the environment should be considered as insufficient and incomplete. Environmental forces can be a major inhibitor to the creation of an entrepreneurial venture. Prior studies have revealed that significant environmental antecedents of entrepreneurial intentions include access to capital (Luthje & Frank, 2003; Ozen Kutanis et al., 2006; Schwarz et al., 2009), knowledge of potential business sector (Kristiansen & Indarti, 2004) and social networks (Sequeira et al., 2007). Luthje and Frank (2003) emphasized that a student might be prepared to establish a company, notwithstanding his relatively bad inclination towards entrepreneurship, because he perceives the founding conditions as very favourable. On the other hand, graduates with a positive attitude towards entrepreneurship may not decide to venture into their own business due to negative perception of critical factors in the environment. Thus, one of the fundamental challenges facing students with an entrepreneurial intention and activities is lack of enabling and supportive environment (Indarti, Rostiani & Nastiti, 2010; F. Khan et al., 2014). These scholars assert that the correlation between environment and entrepreneurial intention is worth researching into. Access to capital, as a variable of the environment, is undoubtedly one of the important determinants in establishing a new business (Kim et al., 2006; Kristiansen & Indarti, 2004). A considerable numbers of people have forsaken their nascent entrepreneurial careers because of an inability to access capital (Marsden, 1992; Meier & Pilgrim, 1994) and in Ghana the situation is even pathetic due to, among other causes the high-interest rates financial institutions charge for loan acquisition. Start-up capital can be procured from personal savings, family, friends, and bank loan or via partnership with an investor (Cetindamar et al., 2012). Prior studies in some developing countries propose that the availability of institutional support enhances growth of entrepreneurial firms (Amankwah-Amoah & Debrah, 2017; Donbesuur et al., 2020; Nakku et al., 2020). Urbano et al. (2020) in a sample of 14 developing countries came out that access to bank credit has a positive effect on entrepreneurship in developing countries. However, Ge et al., (2017) suggest that institutional support might not necessarily lead to successful entrepreneurial outcomes. Cetindamar et al. (2012) have emphasized that regardless of gender, financial capital is a crucial force for any subsequent entrepreneurial activities. Indarti et al. (2010 and Yar et al., 2008) found in their study that environment is a significant factor in influencing entrepreneurial intentions.

From the abovementioned empirical discussion and evidence from prior studies of various researchers in entrepreneurial intention and environment support, the succeeding hypothesis is framed as follows:

H₅: Environment support is positively related to entrepreneurial intention

3. Research methodology

The research design is exploratory research, where the researchers focused on investigating and examining factors influencing students' entrepreneurial intention. We adopted a quantitative research approach to measure constructs, model the relationships between the variables. The data collection technique is the use of questionnaire. The respondents completed a set of seven items influencing entrepreneurial intentions. With the exception of the demographic characteristics, the entire responses format was a 5-point Likert-type scale. The items included entrepreneurial self-efficacy, perceived behavioural control, subjective norm, attitude towards entrepreneurship, locus of control, environmental support and risk-taking propensity. The seven items constituted the independent variables and the dependent variable was entrepreneurial intention. However, the principal component analysis reduced the independent variables items to five.

3.1. Measures

This research adopted items from previous TBP-based studies (e.g., Chen et al., 1998; Greene & Rice, 2007; Krueger et al., 2000) to measure the constructs due to their established construct reliability and validity, as well as their relevance to the purposes of this study. In exploratory studies, values ranging from 0.60 to 0.70 are considered acceptable (Hair et al., 2017). But according to Feldt and Kim (2008), a cut-off value of 0.70 is recommended. We followed Eddleston and Powell (2012) and Powell and Eddleston (2013) and performed confirmatory factor analysis (CFA), which provides a more rigorous test of validity (Cheung & Lau, 2008). The application of a multi-item scale is highly recommended over less reliable single-item measures (Armitage & Conner, 2001); hence, the variables had more than one item. The instruments used for soliciting information from the participants are described in the following section.

Entrepreneurial intention was measured with two items and based on the proposals of Autio et al. (2001), Linan and Chen (2009), Miranda et al. (2017), Obschonka et al. (2015), and Miranda et al. (2017)'s Cronbach Alpha was 0.891. The Cronbach Alpha value for Entrepreneurial Intention is 0.700 as depicted on Table 1.

Attitude towards Entrepreneurship was measured with an adapted questionnaire by Kolvereid (1996). The Cronbach Alpha value for Attitude towards Entrepreneurship is 0.720 as depicted on Table 1, compared to Kolvereid's (1996) values which ranged from 0.68 to 0.90, though he used a 7-point Likert-type scale.

Entrepreneurial Self-efficacy was measured with items from Wilson et al. (2007). The respondents were asked to rate their capabilities against their peers (1 = much worse, 5 = much better) in regards to solving problems, managing money, being creative, getting people's agreement, being a leader, and making decisions. Wilson et al. (2007) reported a Cronbach's alpha of 0.79. For this study, the scale yielded a Cronbach's alpha of 0.785. It is relevant to state that Perceived Behavioural Control was removed from the model after the running of the Principal Component Analysis. Thus, PBC was dropped because of insignificant contribution to prediction of intentions and because of problems with estimation (low reliability). Other empirical studies have also been unable to test this variable (e.g., Kolvereid & Isaksen, 2006; Lortie & Castogiovanni, 2015; Simon & Kim, 2017).

Locus of Control was measured with a ten-item developed by Mueller and Thomas (2001) and some of the items were reverse-coded. A sample of the items are 'when I get what I want, it is usually because I am lucky (Internal Locus of Control) and "success in business is mostly a matter of luck" (External Locus of Control). The Cronbach Alpha value for Locus of Control is 0.843 as depicted on Table 1.

Subjective Norm was measured with previous research by Kolvereid (1996), Krueger et al. (2000), Obschonka et al. (2015), and Miranda et al. (2017)'s Cronbach Alpha was 0.819. Autio et al. (2001) reported a Cronbach's alpha value of 0.70. The Cronbach Alpha value for Subjective Norm is 0.720 as depicted on Table 1.

To measure Environmental Support, we adopted scales from Autio et al. (1997) on a five-point Likert-scale (1 = strongly disagree to 5 = strongly agree). The Cronbach Alpha value for Environmental Support is 0.803 as depicted on Table 1.

Entrepreneurial intentions served as the dependent variable and ATE, SN, ESE, LOC and ES were the independent variables. Prior studies by Zahid and Haji Din (2019) and Dalle et al. (2020) have reported and empirically investigated intentions as a dependent variable. Following prior studies (e.g., Oguntimehin & Olaniran, 2017; Esfandiar et al., 2019; Jena, 2020; Maes et al., 2014; Newman et al., 2019; Nowinski & Haddoub, 2019; Puni et al., 2018; Salami, 2019) we applied Likert-scale for the dependent and independent variables. Likert scale is used to measure psychological attitude,

Table 1. Exploratory factor analysis for factors influencing entrepreneurial intention

		Variance explained	Number of components				Reliability
1	2	3	4	5			
EI	0.700						
LC2	0.843	22.96	.847				
LC3			.920				
LC4			.840				
ES1	0.803	17.30		.811			
ES2				.881			
ES3				.808			
SN1	0.720	11.98			.786		
SN2					.809		
SN3					.745		
ESE3	0.785	11.41				.828	
ESE5						.849	
ESE6						.793	
ATE4	0.720	9.16					.895
ATE5							.843
Total Variance		72.81					
KMO		0.700					
Bartlett test of sphericity	761.046 (Sig =0.000)						

perception or opinion in a mathematical manner. This provides a more objective approach in measuring constructs, hence its choice in this research.

3.2. Sample and data collection

The population of this study was the students of Valley View University (the first private university in Ghana to charter, Techiman campus (VUU-TC) in the Brong Ahafo region of Ghana and Catholic University College of Ghana (CUCG), Sunyani in the Brong Ahafo region of Ghana. CUCG is affiliated to the Ghana's premier university (University of Ghana). The population of VUU-TC MBA students was 126 whereas that of CUCG was 76 as at the period of data collection. The respondents were Master of Business Administration (MBA) students with specialization in Banking and Finance, Strategic Management, Human Resource Management and Accounting. According to Krueger et al. (2000) and Shinnar et al. (2012) a student sample (e.g., master level students) is appropriate to study entrepreneurial intentions since students face immediate career choices and selecting an entrepreneurial career path is a viable alternative. Besides, relying on a student sample provides variation in terms of entrepreneurial intentions and attitudes (Shinnar et al., 2012). Thus, some students' entrepreneurial propensity will be positive whereas others will be negative.

The sample size was 159 out of the total 202 MBA student population from the two universities representing about 79% response rate. The study adopts a simple random sampling technique thus giving every student an equal chance of being selected. Data for the present study were collected via a self-administered questionnaire. The questionnaire was divided into eight sections. The first section (demographic variables) had eight questions, i.e., gender, age, level, marital status, employment status, sector, programme and educational background of respondent'

parents. The response rate was 96% because the respondents answered the questions there and then (in their various lecture halls). Before administering the questionnaire to the students, they were briefed on the survey's objectives. To avoid bias in the responses, the students were assured of anonymity and confidentiality. Variables measured on a 1 to 5 scale with strongly disagree to strongly agree were used with respect to entrepreneurial intention.

Initially, seven thematic areas of entrepreneurial intention were developed in the questionnaire. In order to reduce these variables, we performed a principal component analysis to extract uncorrelated factors for further analysis (Cohen et al., 2003) and to validate the scale after the data collection (Saunders et al., 2009). However, before we performed the principal component analysis, we recoded some items (e.g., LOC) to obtain an empirical summary of the data set (Pallant, 2010). The PCA reduced the seven thematic areas to five.

3.3. Method of data analysis

The data collected were analysed using SPSS and Structural Equation Modelling (SEM) AMOS 7.0. To test the hypotheses and the proposed conceptual model, we used structural equation modelling (SEM), a tool that provides the appropriate and most efficient estimation technique for a series of separate multiple regression equations estimated simultaneously (Hair et al. (2014)). These authors posit that SEM is an appropriate technique for our study because it enables the usage of multi-item latent variables for an independent or dependent variable. SEM also has superior advantage of addressing measurement errors prevalent in such studies. There was no attrition, no missing data in all the variables. There were no outliers.

3.3.1. Model specification

The study aims to examine the factors that influence student entrepreneurial intention, using TPB as the foundation. We formulate a general regression model for entrepreneurial intention.

$$Z_i = \beta_0 + \beta_1 X_1 + \dots \beta_n X_n \quad (1)$$

where Z_i represents the dependent variable

$X_1 \dots X_n$ are sets of explanatory variables and

$\beta_0 \dots \beta_n$ are parameters to be estimated

We introduce our variables into the general model as:

$$EI_s = \alpha_0 + \beta_1 ATE + \beta_2 ESE + \beta_3 LOC + \beta_4 SN + \beta_5 ES + \varepsilon \quad (2)$$

Where; $EI_s = 1$ if a student has entrepreneurial intention

ATE = Attitude towards Entrepreneurship

ESE = Entrepreneurial Self-efficacy

LOC = Locus of Control

SN = Subjective Norm

ES = Environmental Support

ε = Error term

Due to the complex nature of the constructs, we used several questions in order to avoid the danger of not covering key concepts of the variables. We employed factor analysis to reduce the number of items into their uncorrelated structures.

4. Results

The analysis of results covers a description of the demographic characteristics of respondents, factor analysis to reduce the number of constructs to their unobserved structures and analysis of the structural model showing which factors influence student entrepreneurial intention.

4.1. The current situation of MBA Student's entrepreneurial intentions

This research used two items (*I love to create something different* & *I am determined to have my own business in the future*) to measure Entrepreneurial intentions. The respondents' responses were divided into 5 grades (5 =strongly agree, 4 =agree, 3 =neither agree nor disagree, 2 =disagree, 1 =strongly disagree). On the item, *I love to create something different*, 47.8% and 40.3% went for *Agree* and *Strongly Agree* respectively. On the item, *I am determined to have my own business in the future* 32.1% and 61.0% chose *Agree* and *Strongly Agree* respectively. From these two items, we can say that the percentage of students with entrepreneurial intention is relatively high.

4.2. Demographic characteristics of respondents

The respondents were sampled from two private universities in the Brong Ahafo region of Ghana. Approximately 63% of the respondents were sampled from Valley View University-Techiman campus and the remaining 37% were from the Catholic University College of Ghana. Approximately 70% of the respondents were males and the remaining were females. This major disparity in gender at that level of education is not uncommon in Ghana. The highest age category was 30–39, representing 43% whilst the lowest stood at 3% for respondents who were 50 years and over. Approximately 65% of the respondents are married, whereas 35% were single. Approximately 90% of the respondents were Christians. This is understandable because in Ghana, Christianity is the dominant religion in Ghana. Ninety-four percent of the respondents are employed. This is justifiable because one of the entry requirements for most MBA programs in Ghana is work experience. That is, an applicant may be refused admission due to lack of work experience. Approximately 47% of the respondents were in Administration and Managerial positions and 60% were in the public sector. A significant percentage-33% of the respondents' parents had no formal education.

4.3. Factor analysis

Following previous studies (Hoque & Awang, 2016; Hoque et al., 2017; Nguyen et al., 2019), we employed exploratory factor analysis using principal component factoring to reduce the number of questions suitable for the model. The dimension reduction resulted in two items for attitude towards entrepreneurship and three questions each for the other constructs. The exploratory factor analysis uses the rotated component matrix for varimax to select variables with loadings above 0.7. The results show five components with Eigen values above 1 which explains total variance of 72.81%. We performed reliability analysis for the selected items to check internal consistency of the constructs using the Cronbach alpha values and the results show that all the constructs meet the threshold criteria of above 0.7 (Nunnally & Bernstein, 1994). The results can be seen in Table 1.

Table 1 shows the construct measurement in the exploratory factor analysis covering the five variables used in the model. Apart from attitude towards entrepreneurship which was measured by two questions, all other variables have three questions. Using principal components extraction approach of factor analysis, the items were reduced to five uncorrelated components. The variances explained by each factor can be seen in the second column with a cumulative variance of 72.81%. The results for the measurement of internal consistency can be seen under the reliability column. Each variable has scores above 0.7, therefore indicating good constructs. The factor loadings from the rotated components (Varimax rotation method) shows that each item is above 0.7

Having reduced the dimensions of the constructs by exploratory factor analysis, we developed the model for predicting entrepreneurial intention among MBA students in emerging economies. Expanding the equation to include all the variables in the model, we have;

$$EI_s = \alpha_0 + \beta_1 ATE4 + \beta_2 ATE5 + \beta_3 ESE3 + \beta_4 ESE5 + \beta_5 ESE6 + \beta_6 LOC2 + \beta_7 LOC3 + \beta_8 LOC4 + \beta_9 SN1 + \beta_{10} SN2 + \beta_{11} SN3 + \beta_{12} ES1 + \beta_{13} ES2 + \beta_{14} ES3 + \varepsilon \quad (3)$$

where *ATE4 = Starting a business will provide me with Independence*

ATE5 = Starting a business will provide me with opportunity to be my own boss

ESE3 = Being creative

ESE5 = Being a leader

ESE6 = Making decisions

LOC2 = My life is controlled by accidental happenings

LOC3 = When I get what I want, it is usually because I am lucky

LOC4 = SUCCESS in business is mostly a matter of luck

SN1 = My parents are positively oriented towards my future career as an entrepreneur

SN2 = My friends see entrepreneurship as a logical choice for me

SN3 = I believe that people who are important to me, think that I should pursue a career as an entrepreneur

ES1 = There are not sufficient subsidies available for new companies

ES2 = It is hard to find capital providers in my country

ES3 = Banks do not readily give credit to start-up companies

EI = I love to create something different & I am determined to have my own business in the future

4.4. Structural model

We measured the structural model using structural equation modelling (SEM) with the AMOS software. For the path model, we employed the maximum likelihood estimation technique for SEM-AMOS to generate the coefficients for the measured and latent variables. We performed several goodness of fit analyses to ensure confidence in the structural model.

4.5. Measurement of goodness of fit

The formulation of the model was developed using the AMOS 16.0 software package. This analytical technique permits the evaluation of the overall fit of the proposed model and estimation of all corresponding coefficients simultaneously (Hair et al., 2017).

In order to check the absolute model fit, the root-mean-square error of approximation (RMSEA) and the goodness of fit index (GFI) were checked. The results show that GFI (0.932) is greater than 0.9 whilst RMSEA (0.029) is within the acceptable range. Ideally, acceptable RMSEA which indicates a good fit should be <0.08. Our results indicate a good model with root mean square error of

approximation (RMSEA) less than 0.08 (Byrne, 2010). We performed further model fit analyses to check incremental model fit and parsimonious model fit. Apart from AGFI and NFI which are approximately 0.9 (acceptable limit), CFI and TLI are above 0.9 thus indicating that the model passed the incremental fit. The parsimonious model fit result is acceptable. The overall model fit diagnosis shows that the model is good and acceptable.

Table 2 reports results on the goodness of fit of the SEM model. The results show good fit for the entire three model's fit tests. The Chi-Square value is not significantly different from the degrees of freedom and their ratio passes the parsimonious model fit test (1.131).

With the exception of entrepreneurial self-efficacy, all the constructs show significant relation with entrepreneurial intention. The results show that locus of control has significant but negative relation with entrepreneurial intention

Table 3 shows standardized and unstandardized coefficients for the constructs. The results show very significant relation between attitude towards entrepreneurship, subjective norm, locus of control and environmental support. Entrepreneurial self-efficacy does not significantly predict student entrepreneurial intention.

We measured five latent constructs on entrepreneurial intention using the questionnaire carefully developed after reviewing several literatures on the subject. The results show that attitude towards entrepreneurship is the construct that significantly contributes most (68%) in explaining variations in student entrepreneurial intention. This is followed by subjective norm (30%) and environmental support (19%). Interestingly, locus of control shows significant negative relationship with entrepreneurial intention. Overall, the model (all the five constructs) explains 89% of variations in student entrepreneurial intention and this is higher than similar and previous studies. This can be seen in the path model found in Figure 1. In Trivedi's study in 2016, the adjusted R for

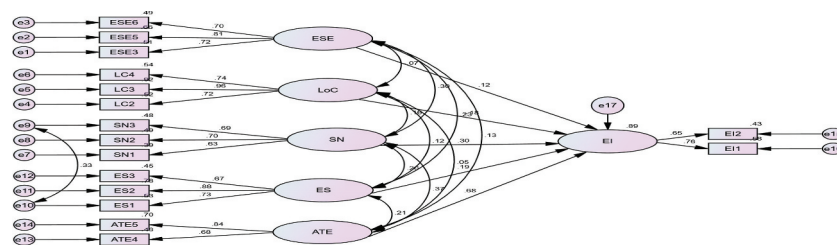
Table 2. Goodness of fit measurement

Measurement		Value
Absolute model fit	Chi-Square (CMIN)	99.532
	RMSEA	0.029
	GFI	0.932
Incremental model fit	AGFI	0.894
	CFI	0.986
	NFI	0.897
	TLI	0.981
Parsimonious model fit	CMIN/DF	1.131

Table 3. Regression weights for SEM

Constructs/ Factors	Estimates		Std Error	CR	P-value
	Standard dized	Unstandar dized			
EI—ESE	.124	.123	.088	1.402	0.161
EI—LoC	-.183	-.098	.041	-2.361	0.018
EI—SN	.301	.250	.090	2.784	0.005
EI—ES	.186	.107	.048	2.207	0.027
EI—ATE	.678	.575	.102	5.613	0.000

Figure 1.



the regression of ATB, SN, PBC and university environment and support on entrepreneurial intention was 0.69 which indicated that the model was highly significant since more than 69% of variation in entrepreneurial intention could be explained by the four predictors.

5. Discussion

This present study analyzed the entrepreneurial intention among the MBA students by reviewing literature on factors influencing Entrepreneurial Intention in line with the Theory of Planned Behaviour as the basic framework and two other variables; Locus of Control and Environmental Support. The results of the present study answer three (3) hypotheses and reject two (2) hypotheses.

The data for the study were obtained from MBA students from two of Ghana's private universities and the results are revealing.

5.1. Attitude towards entrepreneurship and entrepreneurial intention

From the results, it can be said that Attitude towards Entrepreneurship influences the entrepreneurial intention among the MBA students. These results mirror other studies by Armitage and Conner (2001) and Kim and Hunter (1993) whose studies have revealed a positive relationship between attitude towards entrepreneurship and entrepreneurial intention. Attitude Towards Entrepreneurship has statistically positive influence on entrepreneurial intentions among tertiary students (Buli & Yesuf, 2015; Ferreira et al., 2012). Trivedi (2016) also saw a strong and highly significant relationship between attitude and entrepreneurial intention. Surprisingly, Zhang et al. (2015) study which was conducted in the USA failed to generate a significant impact on entrepreneurial intention. In fact, we found a high score in the attitude toward entrepreneurship which incidentally happens to be the highest contribution to the entrepreneurial intentions in our model. Thus, this result showed that the influence of attitudes on intention has high explanatory power and extremely important for increasing entrepreneurial intention. Hence, we can argue that the MBA students are more independent and desire to be their own bosses in the near future with respect to their career path, which has the potential of curbing the problem of unemployment in the long run. Bosma and Kelley (2018) recognize that whenever employment opportunities and well-trodden career paths are scarce, creating a business is one of the few available avenues toward economic prosperity. They posit that the rate of people with the intention to start a business can exceed 60% in developing countries.

5.2. Locus of control and entrepreneurial intention

According to this study, LOC registered a significant but negative impact on the entrepreneurial intention among the MBA students. This finding sharply contradicts a study by Kristiansen and Indarti (2004) who reported a positive but insignificant relationship between LOC and entrepreneurial intentions among Indonesian students. The authors however, in the same study established a negative and insignificant relationship between LOC and EI among Norwegian students. According to Vodă and Nelu (2019), prior empirical research studying the relationship between LOC and EIs in European countries has produced contradictory results. For example, Rajh et al. (2016), in studying the entrepreneurial intentions of 1200 respondents from some European countries, found a positive but insignificant connection between LOC and entrepreneurial intention. Also,

Popescu et al. (2016) in examining undergraduate and master students in Romania found a positive but insignificant relationship between LOC and entrepreneurial intention. Luthans et al. (2006) asserted that individuals with an internal locus of control are likely to positively face challenges and hindrances and they resolve those inhibitors by seeking productive solutions by displaying achievement motivation.

5.3. Entrepreneurial self-efficacy and entrepreneurial intention

In spite of the overwhelming empirical evidence to support a positive relationship between ESE and Entrepreneurial Intentions (Krueger et al., 2000; Luthje & Frank, 2003; Puni et al., 2018), this study revealed that Entrepreneurial Self-efficacy has no effect on the entrepreneurial intention among the MBA students. This is contrary to Sesen's (2012) study that entrepreneurial self-efficacy has a significant impact on entrepreneurial intentions. Laguna (2013) stated that self-efficacy is positively related to entrepreneurial intention. Also, Douglas and Fitzsimmons (2013) established a strong relationship between ESE and the intrapreneurial intentions of MBA students. However, some authors (e.g., Boukamcha, 2015; Kolvereid & Isaksen, 2006) found no evidence of such a relationship. In our study, 60% of the respondents were in the public sector as reported in the descriptive section of the analysis. In Ghana, job security in the public sector is normally guaranteed which inhibit the propensity to venture into entrepreneurial activities. According to Nowinski and Haddoub (2019) a positive attitude towards entrepreneurship is a necessary but not sufficient in fostering entrepreneurial intentions and they further emphasized that a positive attitude towards entrepreneurship needs to be supported by ESE and inspiring role models. According to McGee and Peterson (2019) people who believe in their ability to undertake certain activities are more likely to be successful in those activities.

5.4. Environmental support and entrepreneurial intention

It came out from the study that Environmental Support shows a significant relation with Entrepreneurial Intention. According to Sesen (2012) environmental forces (e.g., access to capital) has a significant impact on entrepreneurial intentions. According to Luthje and Frank (2003) if students realize a hostile environment for business founders due to perhaps the banks do not readily provide loans or because they perceive the state laws as being overly restrictive, they are less likely to venture into entrepreneurship. In Ghana particularly, the hostile and turbulent nature of the environment at times poses a challenge not only to nascent entrepreneurs but even to the existing ones. This is because entrepreneurial finance accessibility is a critical ingredient for success and one of the most important challenges facing entrepreneurial ventures is access to capital at realistically optimal interest rates. According to Jena (2020), the support entrepreneurs get from the environment (e.g., Mentor, Government and Financial institutions) could influence entrepreneurial intentions.

5.5. Subjective norm and entrepreneurial intention

The study revealed that Subjective Norm has positive relationship with EI, which contradicted the findings of other researchers (Autio et al., 2001; Krueger et al., 2000; Linan & Chen, 2009; Maes et al., 2014) which reported a non-significant relationship. Hiatt et al. (2009) established that social norms that inspire regulations can strongly affect organizational formation and failure. However, this study extends Ferreira et al. (2012)'s studies on the effect of Subjective Norm, who established that SN has a significant relationship. Interestingly, Nguyen et al. (2019) did not find the linkage between social norms and entrepreneurial intentions when they examined the factors affecting EIs among the youths in Vietnam. According to Moriano et al. (2012) subjective norms were significantly related to intentions in only two out of the six countries in their study.

6. Implications for theory and practice

This study was able to apply other operational measures than proposed by Ajzen (1991, 2002) to test the robustness of the model in predicting entrepreneurial intentions as suggested by previous studies (Engle et al., 2010).

This study highlighted ATE as one of the important determinants of our framework; hence, entrepreneurial attitudes may be influenced by educators, policymakers and successful business owners.

As the adage goes, “every organization is as good as the people in the organisation”, hence the selection and socialization of leaders (especially top management) and most importantly lecturers who share and endorse the idea that entrepreneurs make the difference in every society is very crucial for the continued relevance of private universities. We believe that by virtue of the superior-subordinate power relationship in Ghana, top management in the academic institutions can inspire entrepreneurial intentions and behaviours among their subordinates (e.g., lecturer) which will eventually cascade down to the students.

Since almost all of our respondents fall within the category of the working class, there are practical implications for private, public and voluntary businesses and industries. It is important for management in the various organisations to instil the entrepreneurial spirit and proclivity in the workers to cause transformation and a turnaround in their respective institutions. This orientation is important not only for the incumbent employees but also for prospective ones in their recruitment and selection.

According to Abadi et al. (2021, p. 3), “people are influenced by norms as they go through and interact with those who are around them in social circumstances, the extent to which people face advocating or inhibiting norms determine the likelihood that they take an action or not”. To the extent that SN has proved an important and significant determinant of entrepreneurial intention is refreshing. The positive effect of subjective norms on entrepreneurial intention is probably due to the prevalence of favourable reactions that the students give to the influences of important people, giving rise to positive intentions. We believe these influences have the potential of creating businesses in Ghana to curb the problem of unemployment in Ghana. According to Asiedu and Donkor (2018), respect for the views of elders and people in one’s close circles is considered an important virtue in Ghanaian culture. These authors emphasize that it is a belief in Ghana that family leaders, community leaders and religious leaders are a repository of great knowledge and wisdom and their counsel is normally held in high esteem. Hence if family associates encourage the respondents to move into an entrepreneurial venture, they are most likely to concede to such an advice (pursuing a career as an entrepreneur). We can infer from the proposition of Asiedu and Donkor (2018) that societal norms can be institutionalized when they are accepted by individuals and groups and the motivation for the transition into entrepreneurial venture can be enhanced, all other thing being equal.

For policymakers, the findings indicate that high interest rate is counterproductive and serve as a disincentive in the encouragement of entrepreneurship. Most especially for these categories of respondents (MBA students) who are already in gainful employment and feel “safe” in their comfort zones, higher cost of capital can further push them away from an entrepreneurial dream. Probably, the government and other policymakers can collaborate with the private universities to institute start-up incentives in order to improve the students’ entrepreneurial inclination. In recent times, private universities in Ghana have been lamenting over government’s negligence.

7. Conclusion

The paper examined the entrepreneurial intentions among MBA students of two private universities in the Brong Ahafo region of Ghana. Specifically, we analyzed how locus of control, entrepreneurial self-efficacy, environmental support, subjective norm and attitude determine students’ entrepreneurial intention.

We confirm that TPB-based variables can be adopted in an area in Ghana’s educational sector which seems to be “forgotten” with respect to entrepreneurial intentions research; thus contributing and deepening to previous TPB-based research on EI.

This study registered statistically significant explanatory power of 89% of the variations in Entrepreneurial Intention, due to ATE, SN, ESE/PBC, ES and LOC which is considered to be more robust given most research fall short of this number. Our study adds to existing literature in an area which has barely produced literature in universities in Ghana (particularly private universities) and the overreliance on the developed countries, through empirically testing of Azjen's TPB-based variables in the context of private universities in Ghana.

This study revealed that the Entrepreneurial Intentions of MBA students are influenced by ATE. This implies that pragmatic strategies and tools should be incorporated in the private MBA curriculum to promote student's attitudes towards job creation. Unfortunately, the total number of entrepreneurship courses taught in each of the two institutions surveyed is not more than two subjects. According to Bogatyreva et al. (2019), on the average, students with entrepreneurial intention during schooling are approximately three times more likely to start a business after school, as compared to students without intention. Besides, Entrepreneurial Intentions are the most proximal predictor of individual academics' engagement in entrepreneurship. However, the universities in Ghana offer few courses related to entrepreneurship. The findings can be used to guide universities in Ghana, government and other stakeholders on how to stimulate entrepreneurial intentions among students.

Entrepreneurial self-efficacy is one of the most important determinants of entrepreneurial intention but this study revealed non-significant relationship; hence, it is recommended that policymakers should allocate resources in a manner that promotes the entrepreneurial self-efficacy of MBA students in the private universities. According to Phong, Thao, and Nguyen (2020, p. 19), "intervention programmes like critical thinking, negotiation, presentation, time management, networking, cross-cultural awareness skills, or even down-to-earth activities related to business skills like basic golf, professional dining, and grooming" can propel entrepreneurial self-efficacy.

8. Limitations and future research

Our data were based purely on quantitative and cross-sectional data. For instance, the cross-sectional nature of this study may not give room for stronger causality inferences. We, therefore, suggest that future research should apply both quantitative and qualitative research approaches, and also, the application of longitudinal research designs, as it can make significant contributions.

We examined the MBA students' perceptions in relation to their future entrepreneurial intentions, but not actual behaviours. Since intentions may not necessarily lead to actions, further longitudinal studies about the factors associated with entrepreneurial intentions and to establish whether the respondents actually "walk the talk". In fact, entrepreneurial intentions, however, are only a first step toward entrepreneurial action and eventual business ownership. According to Krueger et al. (2000), intention-based models examine the intent, but not the timing of venture creation. Interestingly, it may take time after intent metamorphoses before a new venture opportunity is even recognized.

The respondents in our study were primarily students from only two private universities in Ghana, which may render our findings less generalizable to other higher institutions of learning. However, our framework can be adopted and applied in different context for future studies in order to verify the authenticity of the model.

Entrepreneurial education undoubtedly is one of the critical to the success in the development of entrepreneurial competences; hence, the need for policymakers to integrate entrepreneurship education in the MBA programs of private universities, since a number of these courses have the potential of enhancing entrepreneurial intention and propensity. According to Puni et al. (2018), due to the rising rates of unemployment in Sub-Saharan Africa and its attendant economic and

social problems, stakeholders are embracing the concept of entrepreneurship education as a major conduit in shaping the quality of human capital for full employment.

Lastly, the constructs used in this study are not the only variables in the determinants of entrepreneurial intentions. Future studies might integrate broader constructs to measure entrepreneurial intentions among university students.

Funding

The authors received no direct funding for this research.

Author details

Kwaku Amofah^{1,2}

E-mail: kwakuamofah@gmail.com

ORCID ID: <http://orcid.org/0000-0002-3944-5504>

Ramon Saladríguez³

E-mail: ramon.saladriguez@aegern.udl.cat

Ellis Kofi Akwaa-Sekyi^{4,5}

E-mail: el7teen@yahoo.com

ORCID ID: <http://orcid.org/0000-0002-9497-568X>

¹ Law and Business Administration, University of Lleida, Lleida, Spain.

² Faculty of Business and Management, Sunyani Technical University, Sunyani, Ghana.

³ Department of Business Administration, Faculty of Law and Economics University of Lleida, Lleida, Spain.

⁴ Faculty of Economics and Business Administration, Catholic University College of Ghana, Sunyani, Ghana.

⁵ Faculty of Economics and Business Administration, University of Lleida, Lleida, Spain.

Declaration of interest

The authors declared no potential conflicts of interests with respect to the research, authorship, and/or publication of this paper.

Citation information

Cite this article as: Entrepreneurial intentions among MBA students, Kwaku Amofah, Ramon Saladríguez & Ellis Kofi Akwaa-Sekyi, *Cogent Business & Management* (2020), 7: 1832401.

References

- Abadi, B., Mahdavian, S., & Fattahi, F. (2021). The waste management of fruit and vegetable in wholesale markets: Intention and behavior analysis using path analysis. *Journal of Cleaner Production*, 279, 1–13. <https://doi.org/10.1016/j.jclepro.2020.123802>
- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2001). Nature and operations of attitudes. *Annual Review of Psychology*, 52(1), 27–58. <https://doi.org/10.1146/annurev.psych.52.1.27>
- Ajzen, I. (2002). Perceived behavioural control, self-efficacy, locus of control, and the theory of planned behaviour. *Journal of Applied Social Psychology*, 32(4), 665–683. <https://doi.org/10.1111/j.1559-1816.2002.tb00236.x>
- Ajzen, I. (2019). *Theory of Planned Behaviour*. Retrieved 5 April 2019, from <http://people.umass.edu/ajzen/tpb.html>
- Amankwah-Amoah, J., & Debrah, Y. A. (2017). Toward a construct of liability of origin. *Industrial and Corporate Change*, 26(2), 211–231.
- Aragon-Sanchez, A., Baixauli-Soler, S., & Carrasco-Hernandez, A. J. (2017). A missing link: The behavioural mediators between resources and entrepreneurial intentions. *International Journal Behaviour & Research*, 23(5), 752–768.
- Armitage, C., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A metaanalytic review. *British Journal of Social Psychology*, 40(4), 471–499. <https://doi.org/10.1348/014466601164939>
- Asiedu, G. B., & Donkor, E. (2018). Family life education: A Ghanaian perspective. In M. Robila & A. Taylor (Eds.), *Global perspectives on family life education*. Springer.
- Autio, E., Keeley, R. H., & Klofsten, M. (1997). *Entrepreneurial intent among students: Testing an intent model in Asia, Scandinavia and in the USA*. Frontiers of Entrepreneurship Research, Babson College.
- Autio, E., Keeley, R. H., Klofsten, M., Parker, G. G. C., & Hay, M. (2001). Entrepreneurial intent among students in Scandinavia and in the USA. *Enterprise & Innovation Management Studies*, 2(2), 145–161.
- Autio, E., Pathak, S., & Wennberg, K. (2013). Consequences of cultural practices for entrepreneurial behaviours. *Journal of International Behaviour Studies*, 44, 334–362.
- Ayalew, M. M., & Zeleke, A. S. (2018). Modeling the impact of entrepreneurial attitude on self-employment intention among engineering students in Ethiopia. *Journal of Innovation and Entrepreneurship*, 7(8), 1–27. <https://doi.org/10.1186/s13731-018-0088-1>
- Baah-Boateng, W. (2015). Unemployment in Ghana: A cross sectional analysis from demand and supply perspectives. *African Journal of Economic and Management Studies*, 6(4), 402–415. <https://doi.org/10.1108/AJEMS-11-2014-0089>
- Bandura, A. (1992). Exercise of personal agency through the self-efficacy mechanism. In R. Schwartz (Ed.), *Self-efficacy: Thought control of action* (pp. 3–38). Hemisphere.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
- Barbosa, S., Gerhardt, M., & Kickul, J. (2007). The role of cognitive style and risk preference on entrepreneurial self-efficacy and entrepreneurial intentions. *Journal of Leadership and Organisational Studies*, 13(4), 86–104. <https://doi.org/10.1177/10717919070130041001>
- Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *Academy of Management Review*, 13(3), 442–453. <https://doi.org/10.5465/amr.1988.4306970>
- Bogatyreva, K., Edelman, F. L., Manolova, T. S., Osiyevskyy, O., & Shirokova, G. (2019). When do entrepreneurial intentions lead to actions? The role of national culture. *Journal of Business Research*, 96, 309–321. <https://doi.org/10.1016/j.jbusres.2018.11.034>
- Bönte, W., & Jarosch, M. (2011). Gender differences in competitiveness, risk tolerance, and other personality traits: Do they contribute to the gender gap in entrepreneurship? *Paper presented at the Schumpeter School of Business and Economics*, University of Wuppertal, Germany
- Bosma, N., & Kelley, D. J. (2018). *Global entrepreneurship monitor: 2018/2019 global report*. Global Entrepreneurship Research Association.
- Boukamcha, F. (2015). Impact of training on entrepreneurial intentions: An interactive cognitive perspective. *European Business Review*, 27(6), 593–616. <https://doi.org/10.1108/EBR-12-2014-0090>

- Buli, B. M., & Yesuf, W. M. (2015). Determinants of entrepreneurial intentions: Technical-vocational education and training students in Ethiopia. In *Education + Training*, 57, (8/9), 891–907. DOI [10.1108/ET-10-2014-0129](https://doi.org/10.1108/ET-10-2014-0129)
- Byrne, B. M. (2010). *Structured equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). New York.
- Camelo-Ordaz, C., Diáñez-González, J. P., & Ruiz-Navarro, J. (2016). The influence of gender on entrepreneurial intention: The mediating role of perceptual factors. *BRQ Business Research Quarterly*, 19(4), 261–277. <https://doi.org/10.1016/j.brq.2016.03.001>
- Carayannis, E. G., Evans, D., & Hanson, M. (2003). A cross-cultural learning strategy for entrepreneurship education: Outline of key concepts and lessons learned from a comparative study of entrepreneurship students in France and the US. *Technovation*, 23(9), 757–771. [https://doi.org/10.1016/S0166-4972\(02\)00030-5](https://doi.org/10.1016/S0166-4972(02)00030-5)
- Cetindamar, D., Gupta, V. K., Karadeniz, E. E., & Egrican, N. (2012). What the numbers tell: The impact of human family and financial capital on women and men entry into entrepreneurship in Turkey. *Entrepreneurship & Regional Development*, 24(1–2), 29–51. <https://doi.org/10.1080/08985626.2012.637348>
- Chaudhary, R. (2017). Demographic factors, personality and entrepreneurial inclination: A study among Indian university students. *Education and Training*, 59(2), 171–187. <https://doi.org/10.1108/ET-02-2016-0024>
- Chen, C., Greene, P., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13 (4), 13 (4), 295–316. [https://doi.org/10.1016/S0883-9026\(97\)00029-3](https://doi.org/10.1016/S0883-9026(97)00029-3)
- Cheung, G. W., & Lau, R. S. (2008). Testing mediation and suppression effects of latent variables. *Organizational Research Methods*, 11(2), 296–325. <https://doi.org/10.1177/1094428107300343>
- Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied regression/correlation analysis for the behavioral sciences* (3rd ed.). Lawrence Erlbaum.
- Dalle, J., Hastuti, D., Mahmud, P., & Baharuddin, I. (2020). DeLone and McLean model evaluation of information system success: A case study of master program of civil engineering Universitas Lambung Mangkurat. *International Journal of Advanced Science and Technology*, 29(4s), 1909–1919.
- Díaz-Casero, J. C., Ferreira, J. J. M., Mogollón, R. H., & Raposo, M. L. B. (2012). Influence of institutional environment on entrepreneurial intention: A comparative study of two countries university students. *International Entrepreneurship and Management Journal*, 8(1), 55–74. <https://doi.org/10.1007/s11365-009-0134-3>
- Dinis, A., Do Paco, A., Ferreira, J., Raposo, M., & Gouveia Rodrigues, R. (2013). Psychological characteristics and entrepreneurial intentions among secondary students. *Education + Training*, 55(8/9), 763–780. <https://doi.org/10.1108/ET-06-2013-0085>
- Donbesuur, F., Boso, N., & Hultman, M. (2020). The effect of entrepreneurial orientation on new venture performance: Contingency roles of entrepreneurial actions. *Journal of Business Research*, 118, 150–161. <https://doi.org/10.1016/j.jbusres.2020.06.042>
- Douglas, E., & Fitzsimmons, J. (2013). Intrapreneurial intentions versus entrepreneurial intentions: Distinct constructs with different antecedents. *Small Business Economics*, 41(1), 115–132. <https://doi.org/10.1007/s11187-012-9419-y>
- Eddleston, K. A., & Powell, G. N. (2012). Nurturing entrepreneurs' work-family balance: A gendered perspective. *Entrepreneurship Theory & Practice*, 36(3), 513–541. <https://doi.org/10.1111/j.1540-6520.2012.00506.x>
- Engle, R. L., Dimitriadis, N., Gavidia, J. V., Schlaegel, C., Delanoe, S., Alvarado, I., He, X., Baume, S., & Wolff, B. (2010). Entrepreneurial intent: A twelve-country evaluation of Ajzen's model of planned behavior. *International Journal of Entrepreneurial Behaviour & Research*, 16(1), 35–57. <https://doi.org/10.1108/13552551011020063>
- Esfandiar, K., Sharifi-Therami, M., Pratt, S., & Altinay, L. (2019). Understanding the entrepreneurial intentions: A developed integrated structural model approach. *Journal of Business Research*, 94, 172–182. <https://doi.org/10.1016/j.jbusres.2017.10.045>
- Espirito-Olmos, R., & Sastre-Castillo, M. A. (2015). Personality traits versus work values: Comparing psychological theories on entrepreneurial intention. *Journal of Business Research*, 68(7), 1595–1598. <https://doi.org/10.1016/j.jbusres.2015.02.001>
- Feldt, L. S., & Kim, S. (2008). A comparison of tests for equality of two or more independent alpha coefficients. *Journal of Educational Measurement*, 45(2), 179–193. <https://doi.org/10.1111/j.1745-3984.2008.00059.x>
- Ferreira, J., Raposo, M. L., Rodrigues, R. G., Dinis, A., & Paco, A. D. (2012). A model of entrepreneurial intention: An application of the psychological and behavioural approaches. *Journal of Small Business and Enterprise Development*, 19(3), 424–440. <https://doi.org/10.1108/14626001211250144>
- Fini, R., Grimaldi, R., Marzocchi, G. L., & Sobrero, M. (2012). The determinants of corporate entrepreneurial intention within small and newly established firms. *Entrepreneurial Theory and Practice*, 36(2), 387–414. <https://doi.org/10.1111/j.1540-6520.2010.00411.x>
- Ge, J., Stanley, I. J., Eddleston, K., & Kellermanns, F. W. (2017). Institutional deterioration and entrepreneurial investment: The role of political connections. *Journal of Business Venturing*, 32(4), 405–419. <https://doi.org/10.1016/j.jbusvent.2017.04.002>
- Gelaidan, H. M., & Abdullateef, A. O. (2017). Entrepreneurial intentions of business students in Malaysia: The role of self-confidence, educational and relation support. *Journal of Small Business and Enterprise Development*, 24(1), 54–67. <https://doi.org/10.1108/JSBED-06-2016-0078>
- Gielnik, M. M., Bledow, R., & Stark, M. S. (2019). A Dynamic Account of Self-Efficacy in Entrepreneurship. *Journal of Applied Psychology*, 105(1), 487–505. doi:10.1037/apl0000451
- Greene, F. J., & Saridakis, G. (2008). The role of higher education skills and support in graduate self-employment. *Studies in Higher Education*, 33(6), 653–672. <https://doi.org/10.1080/03075070802457082>
- Gultom, S., Dalle, J., Restu, B., & Hairudinor, G. S. (2020). The influence of attitude and subjective norm on citizen's intention to use e-government services. *Journal of Security and Sustainability Issues*, 9, 173–186. [https://doi.org/10.9770/jssi.2020.9.M\(14\)](https://doi.org/10.9770/jssi.2020.9.M(14))
- Gürol, Y., & Atsan, N. (2006). Entrepreneurial characteristics amongst university students: Some insights for entrepreneurship education and training in Turkey. *Education + Training*, 48(1), 25–38. <https://doi.org/10.1108/00400910610645716>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Prentice-Hall, Inc.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Sage.
- Hiatt, S., Sine, W. D., & Tolbert, P. S. (2009). From Pabst to Pepsi: The deinstitutionalization of social practices

- and the creation of entrepreneurial opportunities. *Administrative Science Quarterly*, 54(4), 635–667. <https://doi.org/10.2189/asqu.2009.54.4.635>
- Hisrich, R. D., & Peters, M. P. (2002). *Entrepreneurship* 5th Ed. McGraw-Hill.
- Hockerts, K. (2017). Determinants of social entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 41(1), 105–130. <https://doi.org/10.1111/etap.12171>
- Hofstede, G. (2012). *Geert hofstede cultural dimensions*. Retrieved 1 May 2018, from <http://geerthofstede.Com>
- Hoque, A. S. M. M., & Awang, Z. (2016). *Exploratory factor analysis of entrepreneurial marketing: Scale development and validation in the SME context of Bangladesh*.
- Hoque, A. S. M. M., Awang, Z., Jusoff, K., Salleh, F., & Muda, H. (2017). Social business efficiency: Instrument development and validation procedure structural equation modeling. *International Business Management*, 11, 222–231.
- Hsiao, C., Lee, Y. H., & Chen, H. H. (2016). The effects of internal locus of control on entrepreneurship: The mediating mechanisms of social capital and human capital. *The International Journal of Human Resource Management*, 27(11), 1158–1172. <https://doi.org/10.1080/09585192.2015.1060511>
- Hsu, D. K., Burmeister-Lamp, K., Simmons, S. A., Foo, M. D., Hong, M. C., & Pipes, J. D. (2019). I know I can, but I don't fit: Perceived fit, self-efficacy, and entrepreneurial intention. *Journal of Business Venturing*.
- Hsu, D. K., Wikluud, J., & Cotton, R. D. (2017). Success, failure, and entrepreneurial reentry: An experimental assessment of the veracity of self-efficacy and prospect theory. *Entrepreneurship Theory and Practice*, 41(1), 19–49. <https://doi.org/10.1111/etap.12166>
- Hussain, S. (2018). Towards nurturing the entrepreneurial intentions of neglected female business students of Pakistan through proactive personality, self-efficacy and university support factors. *Asia Pacific Journal of Innovation and Entrepreneurship*, 12(3), 363–378. <https://doi.org/10.1108/apjie-03-2018-0015>
- Iakovleva, T., Kolvereid, L., & Stephan, U. (2011). Entrepreneurial intentions in developing and developed countries. *Education and Training*, 53(5), 353–370. <https://doi.org/10.1108/00400911111114>
- Indarti, N., Rostiani, R., & Nastiti, T. (2010). Underlying factors of entrepreneurial intentions among Asian students. *South East Asian Journal of Management*, 4 (2), 143–159.
- Jena, R. K. (2020). Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study. *Computers in Human Behavior*, 107, 1–10. <https://doi.org/10.1016/j.chb.2020.106275>
- Johnmark, D. R., Munene, J. C., & Balunywa, W. (2016). Robustness of personal initiative in moderating entrepreneurial intentions and actions of disabled students. *Cogent Business & Management*, 3, 1–16.
- Kankam, B. O., & Abukari, H. (2020). Predicting residents' intention to conserve the hooded vulture (*Necrosyrtes monachus*) in the Birem North District, Ghana. *Heliyon*, 6(9), 1–13. <https://doi.org/10.1016/j.heliyon.2020.e04966>
- Khan, F., Yusoff, R. M., & Khan, A. (2014). Job Demands, Burnout and Resources in Teaching a Conceptual Review. *World Applied Sciences Journal*, 30(1), 20–28.
- Kickul, J., & Gundry, L. K. (2002). Prospecting for strategic advantage: The proactive entrepreneurial personality and small firm innovation. *Journal of Small Business Management*, 40(2), 85–97. <https://doi.org/10.1111/1540-627X.00042>
- Kickul, J., Gundry, L. K., Barbosa, S. D., & Whitcanack, L. (2009). Intuition versus analysis? Testing differential models of cognitive style on entrepreneurial self-efficacy and the new venture creation process. *Entrepreneurship Theory and Practice*, 33(2), 439–453. <https://doi.org/10.1111/j.1540-6520.2009.00298.x>
- Kim, M., & Hunter, J. (1993). Relationships among Attitudes, Intentions and Behaviour. *Communication Research*, 20(3), 331–364. <https://doi.org/10.1177/009365093020003001>
- Kim, P. H., Aldrich, H. E., & Keister, L. A. (2006). Access (not) denied: The impact of financial, human and cultural capital on entrepreneurship entry in the United States. *Small Business Economics*, 27(1), 5–22. <https://doi.org/10.1007/s11187-006-0007-x>
- Koh, H. C. (1996). Testing hypotheses of entrepreneurial characteristics: A study of Hong Kong MBA Students. *Journal of Managerial Psychology*, 11(3), 12–25. <https://doi.org/10.1108/02683949610113566>
- Kolvereid, L. (1996). Prediction of Employment Status Choice Intentions. Working Paper Series. Henley Management College HWP.
- Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. *Journal of Business Venturing*, 21(6), 866–885. <https://doi.org/10.1016/j.jbusvent.2005.06.008>
- Kristiansen, S., & Indarti, N. (2004). Entrepreneurial intentions among Indonesian and Norwegian students. *Journal of Enterprising Culture*, 12(1), 55–78. <https://doi.org/10.1142/S021849580400004X>
- Krueger, N. F., Jr., & Brazeal, D. V. (1994). Entrepreneurial potential and potential entrepreneurs. *Entrepreneurship Theory and Practice*, 18(3), 91–104. <https://doi.org/10.1177/104225879401800307>
- Krueger, N. F., Jr., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, 15, 411–432.
- Kuada, J. (2015). Entrepreneurship in Africa—a classificatory framework and a research agenda. *African Journal of Economic and Management Studies*, 6(2), 148–163. <https://doi.org/10.1108/AJEMS-10-2014-0076>
- Laguna, M. (2013). Self-efficacy, self-esteem, and entrepreneurship among unemployed. *Journal of Applied Social Psychology*, 43(2), 253–262. <https://doi.org/10.1111/j.1559-1816.2012.00994.x>
- Lechler, T. (2001). Social interaction: A determinant of entrepreneurial team venture success. *Small Business Economics*, 16(4), 263–278. <https://doi.org/10.1023/A:1011167519304>
- Lee-Ross, D. (2017). An examination of the entrepreneurial intent of MBA students in Australia using the entrepreneurial intention questionnaire. *Journal of Management Development*, 36(9), 1180–1190. <https://doi.org/10.1108/JMD-10-2016-0200>
- Linan, F., & Chen, Y. W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593–617. <https://doi.org/10.1111/j.1540-6520.2009.00318.x>
- Lortie, J., & Castogiovanni, G. (2015). Then theory of planned behavior in entrepreneurship research: What we know and future directions. *International Entrepreneurship and Management Journal*, 11(4), 935–957. <https://doi.org/10.1007/s11365-015-0358-3>
- Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. M. (2006). Psychological capital development: Towards a micro-intervention. *Journal of Organisational Behaviour*, 27(3), 387–393. <https://doi.org/10.1002/job.373>
- Luthje, C., & Frank, N. (2003). The making of an entrepreneur: Testing a model of entrepreneurial intent

- among engineering students at MIT. *R&D Management*, 33(2), 135–147. <https://doi.org/10.1111/1467-9310.00288>
- Maes, J., Leroy, H., & Sels, L. (2014). Gender differences in entrepreneurial intentions: A TPB multi-group analysis at factor and indicator level. *European Management Journal*, 32(5), 784–794. <https://doi.org/10.1016/j.emj.2014.01.001>
- Marsden, K. (1992). African entrepreneurs-pioneers of development. *Small Enterprise Development*, 3(2), 15–25.
- Mazzarol, T., Volery, T., Doss, N., & Thein, V. (1999). Factors influencing small business startup. *International Journal of Entrepreneurial Behaviour and Research*, 5(2), 48–63. <https://doi.org/10.1108/13552559910274499>
- McGee, J. E., & Peterson, M. (2019). The long-term impact of entrepreneurial self-efficacy and entrepreneurial orientation on venture performance. *Journal of Small Business Management*, 57(3), 720–737.
- McGee, J. E., Peterson, M., Mueller, S. L., & Sequeira, J. M. (2009). Entrepreneurial self-efficacy: Refining the measure. *Entrepreneurship Theory and Practice*, 33(4), 965–988. <https://doi.org/10.1111/j.1540-6520.2009.00304.x>
- Meier, R., & Pilgrim, M. (1994). Policy-induced constraints on small enterprise development in Asian developing countries. *Small Enterprise Development*, 5(2), 66–78. <https://doi.org/10.3362/0957-1329.1994.017>
- Miao, C., Qian, S., & Ma, D. (2016). The relationship between entrepreneurial self-efficacy and firm performance: A meta-analysis of main and moderator effects. *Journal of Small Business Management*, 55(1), 87–107.
- Miranda, F. J., Chamorro-Mera, A., & Rubio, S. (2017). Academic entrepreneurship in Spanish universities: An analysis of the determinants of entrepreneurial intention. *European Research on Management and Business Economics*, 23(2), 113–122. <https://doi.org/10.1016/j.jedeen.2017.01.001>
- Moriano, J. A., Gorgievski, M., Laguna, M., Stephan, U., & Zarafshani, K. (2012). A cross-cultural approach to understanding entrepreneurial intention. *Journal of Career Development*, 39(2), 162–185. <https://doi.org/10.1177/0894845310384481>
- Mueller, S. L., & Thomas, A. S. (2001). Culture and entrepreneurial potential: A nine country of locus of control and innovativeness. *Journal of Business Venturing*, 16(1), 51–75. [https://doi.org/10.1016/S0883-9026\(99\)00039-7](https://doi.org/10.1016/S0883-9026(99)00039-7)
- Nabi, G., & Linan, F. (2011). Graduate entrepreneurship in the developing world: Intentions, education and development. *Education & Training*, 53(5), 5. <https://doi.org/10.1108/00400911111147668>
- Nakku, V. B., Agobola, F. W., Miles, M. P., & Mahmood, A. (2020). The interrelationship between SME government support programs, and entrepreneurial orientation, and performance: A developing economy perspective. *Journal of Small Business Management Science*, 58(1), 2–31. <https://doi.org/10.1080/00472778.2019.1659671>
- Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of Vocational Behaviour*, 110, 403–419. <https://doi.org/10.1016/j.jvb.2018.05.012>
- Newman, A., Obschonka, M., Schwarz, S., Cohen, M., & Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of Vocational Behavior*, 110(October 2019), 403–419. <https://doi.org/10.1016/j.jvb.2018.05.012>
- Ng, T. W. H., Sorensen, K. L., & Eby, L. T. (2006). Locus of control at work: A metaanalysis. *Journal of Organisational Behaviour*, 27(8), 1057–1087.
- Nguyen, A. T., Do, T. H. H., Vu, T. B. T., Dang, K. A., & Nguyen, H. L. (2019). Factors affecting entrepreneurial intentions among youths in Vietnam. *Children and Youth Services Review*, 99, 186–193. <https://doi.org/10.1016/j.childyouth.2019.01.039>
- Nowinski, W., & Haddoub, M. Y. (2019). The role of inspiring role models in enhancing entrepreneurial intention. *Journal of Business Research*, 96, 183–193. <https://doi.org/10.1016/j.jbusres.2018.11.005>
- Nunnally, J. C., & Bernstein, I. H. (1994). *The assessment of reliability. Psychometric theory*. McGraw-Hill.
- Obschonka, M., Hahn, E., & Bajwa, N. (2018). Personal agency in newly arrived refugees: The role of personality, entrepreneurial cognitions and intentions, and career adaptability. *Journal of Vocational Behavior*, 105, 173–184.
- Obschonka, M., Silbereisen, R. K., Cantner, U., & Goethner, M. (2015). Entrepreneurial self-identity: Predictors and effects within the theory of planned behavior framework. *Journal of Business and Psychology*, 30(4), 773–794. <https://doi.org/10.1007/s10869-014-9385-2>
- Obschonka, M., Silbereisen, R. K., & Schmitt-Rodermund, E. (2012). Explaining entrepreneurial behaviour: Dispositional personality traits, growth of personal entrepreneurial resources, and business idea generation. *The Career Development Quarterly*, 60(2), 178–190. <https://doi.org/10.1002/j.2161-0045.2012.00015.x>
- Ofori-Atta, K. (2019). 2018 Annual Report National Accreditation Board.
- Oguntimehin, A., & Olaniran, O. (2017). the Relationship Between Entrepreneurship Education and. *British Journal of Education*, 5(3), 9–20. Retrieved from <http://www.eajournals.org>
- Ozaralli, N., & Rivenburgh, N. K. (2016). Entrepreneurial intention: Antecedent to entrepreneurial behavior in the USA and Turkey. *Journal of Global Entrepreneurship Research*, 6(1), 3
- Ozen Kutanis, R., Bayraktaroglu, S., & Bozkurt, O. (2006). Is the personality features important in entrepreneurial orientation and experience. *14th National Management and Organisation Congress Proceedings in Erzurum* (pp. 12–32). Ataturk University, Erzurum.
- Pallant, J. (2010). *SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS*. Open University Press.
- Paul, J., & Shrivastava, A. (2015). Comparing entrepreneurial communities: Theory and evidence from a cross-country study in Asia. *People and Places in the Global Economy*, 9(3), 206–220.
- Peterman, N. E., & Kennedy, J. (2003). Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship Theory and Practice*, 28(2), 129–144. <https://doi.org/10.1046/j.1540-6520.2003.00035.x>
- Phong, N. D., Thao, N. T. P., & Nguyen, N. P. (2020). Entrepreneurial intent of business students: Empirical evidence from a transitional economy. *Cogent Business and Management*, 7(1). <https://doi.org/10.1080/23311975.2020>
- Pittaway, L., Rodriguez-Falcon, E., Aiyegbayo, O., & King, A. (2010). The role of entrepreneurship clubs and

- societies in entrepreneurial learning. *International Small Business Journal*, 29(1), 37–57. <https://doi.org/10.1177/0266242610369876>
- Popescu, C. I., Robu, I., Diaconu, L., & Diaconu, L. (2016). An Analysis of the Determinants of Entrepreneurial Sustainability, 8(8), 771. <https://doi.org/10.3390/su8080771>
- Powell, G. N., & Eddleston, K. A. (2013). Linking family-to-business and enrichment and support to entrepreneurial success: Do family and male entrepreneurs experience different outcomes? *Journal Business Venturing*, 28(2), 261–280.
- Prodan, I., & Drnovsek, M. (2010). Conceptualizing academic-entrepreneurial intentions: An empirical test. *Technovation*, 30(5–6), 332–347. <https://doi.org/10.1016/j.technovation.2010.02.002>
- Puni, A., Anlesinya, A., & Korsorku, P. D. A. (2018). Entrepreneurial education, self-efficacy and intentions in Sub-Saharan Africa. *African Journal of Economic and Management Studies*, 9(4), 492–511. <https://doi.org/10.1108/AJEMS-09-2017-0211>
- Rajh, E., Budak, J., Ateljević, J., Davčev, L., Jovanov, T., & Ognjenović, K. (2016). Entrepreneurial Intentions in Selected Southeast European Countries. *Randi Materijali EIZ*, 9, 5–27.
- Rauch, A., & Frese, M. (2007). Born to Be an Entrepreneur? Revisiting the Personality Approach to Entrepreneurship. *The Psychology of Entrepreneurship. The Organizational Frontiers*, (February 2017), 41–65.
- Rauch, A., & Frese, M. (2007b). Let's put the person back into entrepreneurship research: A meta-analysis of the relationship between owners' personality characteristics and business creation and success. *European Journal of Work and Organisational Psychology*, 16(4), 353–385.
- Rauch, A., Wang, F. M., Unger, Z. M., Lozada, J., Kupcha, M., & Spirina, T. (2013). National culture and cultural orientations of owners affecting the innovation-growth relationship in five countries. *Entrepreneurship and Regional Development*, 25(9–10), 732–755. <https://doi.org/10.1080/08985626.2013.862972>
- Read, D. L., Brown, R. F., Thorsteinsson, E. B., Morgan, M., & Price, I. (2013). The theory of planned behaviour as a model for predicting public opposition to wind farm developments. *Journal of Environmental Psychology*, 36, 70–76. doi:10.1016/j.jenvp.2013.07.001
- Rotter, J. B. (1990). Internal vs. external control of reinforcement: A case history of a variable. *American Psychologist*, 45(4), 489–493. <https://doi.org/10.1037/0003-066X.45.4.489>
- Salami, S. O. (2019). Examining the emerging entrepreneurial mindset in adolescence: A study in Nigeria. *International Journal of Psychology*, 54(1), 70–79.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business*. Prentice Hall.
- Schwarz, E. J., Wdowiak, M. A., Almer-Jarz, D. A., & Breitenacker, R. J. (2009). The effects of Attitudes and Perceived Environmental Conditions on Students' Entrepreneurial Intent. *Education + Training*, 51(4), 272–291. <https://doi.org/10.1108/00400910910964566>
- Sequeira, J., Mueller, S. L., & McGee, J. E. (2007). The influence of social ties and self-efficacy in forming entrepreneurial intentions and motivating nascent behavior. *Journal of Developmental Entrepreneurship*, 12(3), 275–293. <https://doi.org/10.1142/S108494670700068X>
- Sesen, H. (2012). Personality or environment? A comprehensive study on the entrepreneurial intentions of university students. *Education + Training*, 55(7), 624–640. <https://doi.org/10.1108/ET-05-2012-0059>
- Shinnar, R. S. O., Giacomini, O., & Janssen, J. (2012). Entrepreneurial Perception and intentions: The Role of Gender and Culture. *Entrepreneurship Theory and Practice*, 36(3), 465–493.
- Simon, M., & Kim, J. (2017). Two sources of overconfidence: Incorporating disconfirming feedback in an entrepreneurial context. *Journal of Small Business Strategy*, 27(3), 9–24.
- Stephen, F., Urbano, D., & Hemmen, S. (2005). The impact of institutions on entrepreneurial activity. *Managerial and Decision Economics*, 26(7), 413–419. DOI: 10.1002/mde.1254
- Takyi-Asiedu, S. (1993). Some socio-cultural factors retarding entrepreneurial activity in Sub-Saharan Africa. *Journal of Business Venturing*, 8(2), 91–98.
- Terry, D. J. (1993). Self-efficacy expectancies and the theory of reasoned action. In D. J. Terry, C. Gallois, & M. McCamish (Eds.), *The theory of reasoned action: Its application to AIDS-preventive behavior* (pp. 135–151). Pergamon.
- Tiessen, J. H. (1997). Individualism, collectivism, and entrepreneurship: A framework for international comparative research. *Journal of Business Venturing*, 12(5), 367–384. [https://doi.org/10.1016/S0883-9026\(97\)81199-8](https://doi.org/10.1016/S0883-9026(97)81199-8)
- Tkachev, A., & Kolvereid, L. (1999). Self-employment intentions among Russian students. *Entrepreneurial and Regional Development*, 11(3), 269–280.
- Tran, A. T. P., & Von Korflesch, H. (2016). A conceptual model of social entrepreneurial intention based on the social cognitive career theory. *Asia Pacific Journal of Innovation and Entrepreneurship*, 10(1), 17–38. <https://doi.org/10.1108/APJIE-12-2016-007>
- Trivedi, R. (2016). Does university play significant role in shaping entrepreneurial intention? A cross-country comparative analysis. *Journal of Small Business and Enterprise Development*, 23(3), 790–811. <https://doi.org/10.1108/JSBED-10-2015-0149>
- Urbano, D., Audretsch, D., Aparicio, S., & Noguera, M. (2020). Does entrepreneurial activity matter for economic growth in developing countries? The role of the institutional environment. *International Entrepreneurship and Management Journal*, 16, 1065–1099.
- Van de Ven, H. (1993). The development of an infrastructure for entrepreneurship. *Journal of Business Venturing*, 8(6), 211–230. [https://doi.org/10.1016/0883-9026\(93\)90028-4](https://doi.org/10.1016/0883-9026(93)90028-4)
- Van Gelderen, M., Brand, M., Van Praag, M., Bodewes, W., Poutsma, E., & Van Gils, A. (2008). Explaining entrepreneurial intentions by means of the theory of planned behavior. *Career Development International*, 13(6), 538–559. <https://doi.org/10.1108/13620430810901688>
- Veciana, J. M., Aponte, M., & Urbano, D. (2005). University students' attitudes towards entrepreneurship: A two countries comparison. *International Entrepreneurship Management Journal*, 1(2), 165–182. <https://doi.org/10.1007/s11365-005-1127-5>
- Vodă, I. A., & Nelu, F. (2019). Impact of personality traits and entrepreneurship education on entrepreneurial intentions of business and engineering students. *Sustainability*, 11(1192), 1–19. <https://doi.org/10.3390/su11041192>
- Wijerathna, R. M. S. (2015). Factors predicting the intention of academics of faculties of agriculture in the state universities in Sri Lanka to engage in outreach activities. *Tropical Agricultural Research*, 26(2), 285–293. <https://doi.org/10.4038/tar.v26i2.8092>

- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, 31(3), 387–401.
- Yar, D. H., Wennberg, W., & Berglund, H. (2008). Creativity in entrepreneurship education. *Journal of Small Business and Enterprise Development*, 15(2), 304–320. <https://doi.org/10.1108/14626000810871691>
- Yazdanpanah, M., & Forouzani, M. (2015). Application of the Theory of Planned Behaviour to predict Iranian students' intention to purchase organic food. *Journal of Cleaner Production*, 107, 342–352. doi:10.1016/j.jclepro.2015.02.071
- Zahid, H., & Haji Din, B. (2019). Determinants of Intention to Adopt E-Government Services in Pakistan: An Imperative for Sustainable Development. *Resources*, 8(3), 128.
- Zakaria, H., Adam, H., & Abujaja, A. M. (2014). Assessment of agricultural students of university for development studies intention to take self-employment in agribusiness. *International Journal of Information and Business Management*, 21(1), 53–67.
- Zhang, P., Wang, D. D., & Owen, C. L. (2015). A study of entrepreneurial intention of university students. *Entrepreneurship Research Journal*, 5(1), 61–82.
- Zigarmi, D., Galloway, F. J., & Roberts, T. P. (2018). Work locus of control, motivational regulation, employee work passion, and work intentions: An empirical investigation of an appraisal model. *Journal of Happiness Studies*, 19(1), 231–257. <https://doi.org/10.1007/s10902-016-9813-2>



© 2020 The Author(s). This open access article is distributed under a Creative Commons Attribution (CC-BY) 4.0 license.



You are free to:

Share — copy and redistribute the material in any medium or format.

Adapt — remix, transform, and build upon the material for any purpose, even commercially.

The licensor cannot revoke these freedoms as long as you follow the license terms.

Under the following terms:

Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made.

You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.

No additional restrictions

You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

***Cogent Business & Management* (ISSN: 2331-1975) is published by Cogent OA, part of Taylor & Francis Group.**

Publishing with Cogent OA ensures:

- Immediate, universal access to your article on publication
- High visibility and discoverability via the Cogent OA website as well as Taylor & Francis Online
- Download and citation statistics for your article
- Rapid online publication
- Input from, and dialog with, expert editors and editorial boards
- Retention of full copyright of your article
- Guaranteed legacy preservation of your article
- Discounts and waivers for authors in developing regions

Submit your manuscript to a Cogent OA journal at www.CogentOA.com

